

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011632**Date Inspected:** 15-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yan Hau**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG COMPONENT**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance(QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

Bay #14

This QA Inspector observed the following work in progress:

FCAW in the 1G position for the OBG Traveler Rail UT repair area, weld No.10TR3-025-014. The welder is identified as #044774. ZPMC QC is identified as Mr. Wang Lu. The welding variables recorded by QC appear to comply with WPS-345-FCAW-1G(1F)-REPAIR.

FCAW in the 1G position for the OBG Traveler Rail UT repair area, weld No.10TR3-031-007. The welder is identified as #051348. ZPMC QC is identified as Mr. Liu Hua Jie. The welding variables recorded by QC appear to comply with WPS-345-FCAW-1G(1F)-REPAIR.

SMAW in the 4G position for the OBG Segment 11EW, weld No.SSD13A-PP108-127. The welder is identified as #204730. ZPMC QC is identified as Mr. Li Ming Yang. The welding variables recorded by QC appear to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW in the 4G position for the OBG Segment 11EW, weld No.SSD13A-PP107-127. The welder is identified

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as #047864. ZPMC QC is identified as Mr. Li Ming Yang. The welding variables recorded by QC appear to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

### Out Side Yard

This QA Inspector observed the following work in progress:

FCAW in the 2F position for the OBG Cross Beam Corner Assembly , weld No.SSD-25-PP74-037. The welder is identified as #203871. ZPMC QC is identified as Mr. Li Ping. The welding variables recorded by QC appear to comply with WPS-B-T-2132-3.

FCAW in the 2F position for the OBG Cross Beam Corner Assembly , weld No.SSD-25-PP76-137. The welder is identified as #207465. ZPMC QC is identified as Mr. Li Ping. The welding variables recorded by QC appear to comply with WPS-B-T-2132-3.

### Ultrasonic Testing(UT)

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as Crossbeam Corner joint.

The Weld Designation is as follows

CB-202G-050-089,091,109,111 and 113  
CB-202A-016-002

During the Quality Assurance Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) Cross Beam CB16, this Quality Assurance Inspector (QA) discovered that three(3) class “A” indications measuring approximately 35mm ,20mm and 10mm in length respectively. The 1st indication dB rating is +1, 2nd indication dB rating is +5 and 3rd indication dB rating is +8. Material thickness is 18mm. The depth of the indications are approximately 8mm, 11mm and 10mm respectively. The weld is identified as CB202A-016-002. The weld is designated as Non Seismic Performance Critical Material (Non SPCM). The indications are clearly marked on or near the weld. For further details concerning these indications refer to Ultrasonic Testing (UT) report generated by this QA on this date. The Y distance from Floor Beam FB-204-050 for indications are 240mm, 590mm and 730mm respectively. The weld is a Complete Joint Penetration (CJP) Corner joint joining Side plate SP203A (Non SPCM) to Deck Plate DP204A (Non SPCM). CB16 is located outside the north end of Bay#17.

This QA Inspector generated an incident report for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations

### Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bera,Subhasis	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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